

AL-5-R  
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# **METER LOOP INSTALLATIONS**

## **PROCEDURES, SPECIFICATIONS & DRAWINGS**



**RURAL ELECTRIFICATION ADMINISTRATION**



**U. S. D. A.**

JUL 24 1946

THE NECESSARY SUPPLY OF ALL CONTRACT FORMS,  
BOND, ETC. CONTAINED IN THIS PROCEDURE, WILL  
BE FURNISHED TO THE BORROWER, UPON REQUEST,  
BY THE APPLICATIONS AND LOANS DIVISION.

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## INSTRUCTIONS FOR HOME AND FARM WIRING AND SERVICE METER LOOP INSTALLATIONS.

### I. FARM AND HOME WIRING INSTALLATIONS.

Follow the procedures outlined in Wiring Procedures Manual, Form AL-63.

### II. METER LOOP INSTALLATIONS.

- A. The Rural Electrification Administration recommends that borrowers finance and supervise the installation of meter loops because this--
  1. Reduces overall wiring cost to consumers.
  2. Induces more consumers to come on the line.
  3. Gets a better job done.
  4. Assures uniformity and adequacy of meter loop installations.
  5. Helps maintain contacts with consumers for promotional and load-building purposes.
- B. This recommendation applies to new service connections only; REA recommends against making this financing retroactive.
- C. Such installations should be financed from construction loan funds. Approval to use such funds for this purpose may be granted on request.
- D. In staking lines or line extensions for the connection of new consumers a yard pole for meter loop should be provided for in all cases where two or more major buildings are to be wired.
- E. In accordance with Engineering Memorandum No. 95R5, the grounding conductor and electrode installation on the yard pole meter pole shall be considered as part of the line construction. Therefore the grounding installation is not considered part of the meter loop installations on the yard pole.
- F. REA does not recommend the inside loan centers or service equipment be included as part of the installation furnished to the consumer.
- G. Those borrowers which have in the past furnished the inside service equipment or load centers, as part of the meter loop, may continue to do so.
- H. REA recommends use of circuit breaker equipment at the meter because it reduces:
  1. Probably transformer outages.
  2. Necessity for service trips by system employees to restore service. This is the case even though self-protected transformers are used.
- I. All matters pertaining to farm and home wiring and service meter loop installations should be referred to the Applications and Loans Division.

### III. SUGGESTED METHODS FOR ARRANGING CONTRACTS.

A. Hold meetings of wiring contractors who are interested in making wiring and meter loop installations on consumer premises of your system. (These meetings may be held concurrently with the wiring contractor meetings outlined in the "Wiring Procedures Manual," Form AL-63.)

1. Outline complete service meter loop installation requirements as to specifications and materials.
2. Next get contractors to give you quotations on complete installation of each unit. These prices should be based upon the number of installations that each contractor can take care of within the time limit set by the Board of Directors for the completion of line construction. The final prices agreed upon must be acceptable to both the borrower and to the REA. The cooperative should execute a contract (Form AL-5A-R) with each contractor who agrees to the unit prices accepted. Three copies of each executed contract should be submitted for approval to the Applications and Loans Division. A certified copy of the board resolution, authorizing the President of the Board to execute the contract, must be submitted with each set of contracts.
3. At this same contractor's meeting the manager should explain the group wiring plan as outlined in the "Wiring Procedures Manual," Form AL-63. It may be desirable for the contractor who installs the farmstead wiring to also install the meter loop.

#### B. Insurance and Bond:

Insurance and bond are required when 100 or more units are assigned to any contractor. The Board may decide that all contractors shall provide insurance and a bond in every case. Private (or individual) surety will not be acceptable.

#### C. Alternate Contract Method:

Borrowers may, if they wish, invite bids on the entire group of meter loop installations. In such cases a closed bid form of procedure may be followed. Should the bids received exceed the prices considered reasonable, additional or new bids should be called for.

#### D. After Contract Approval by REA:

1. As soon as the approved copies of contracts have been returned to you (one for your files and one for the contractor) the contractor should proceed immediately with the installations.
2. Funds may be requisitioned as you need them for payment to the contractor, not to exceed 90% of the sums due the contractor for installations made, inspected, and approved.

3. The final 10% may be requisitioned only after you have received a complete inventory from your contractor. Three copies of an inventory and three copies of a completion certificate must be submitted to the Applications and Loans Division for approval. Sample forms of inventory and completion certificate are contained in this manual.

E. Force Account Installations:

If the borrower wishes, it may use its qualified employees in assembling and installing of meter loops by force account, using work order procedure for reporting these installations.

For those contracts under which the borrower finds that a major increase in the number of installations will be necessary at no increase in prices, a "Supplementary Contract," Form AL-5B, should be prepared, executed in triplicate and submitted for approval in the same manner as for the original contract. The necessary change in amounts of bond and insurance which were required in the original contract should be arranged.

Whenever a borrower and contractor desire to change any condition of a contract which has been previously approved, an amendment should be submitted in triplicate for approval somewhat as outlined in Form AL-5C. The borrower should have its attorney check the wording of the final amendment before submitting to the Applications and Loans Division.

A yard pole is to be used for the meter location when there are two or more major buildings to be wired. A yard pole should be located by the manager or his representative, after consulting the owner and obtaining his approval. It should be located as near the center of the ultimate load as possible and where it will offer the least obstruction to view or passage.

It is the engineer's responsibility to stake for a yard pole and for that reason the location should be agreed upon before staking starts. It should also be located before house wiring is planned, since changes after staking are expensive to the cooperative. It is imperative that the proper location be selected, and the owner advised that changes cost money. Location should be marked by stake.

An agreement form with space provided for a simple drawing of the farmstead layout showing yard pole location with reference to buildings is beneficial and should be executed in triplicate, one form left with owner, one delivered to engineer, and one placed in cooperative files. (See suggested form AL-5D.)

The persons locating yard poles should have experience in farmstead wiring, but when it is not possible to engage experienced people, an Applications and Loans Field Representative will be available to train them for this work.

PROPOSAL TO FURNISH AND INSTALL METER LOOP SERVICE

To SMITH COUNTY ELECTRIC COOPERATIVE, INC.

(hereinafter called the "Owner").

1. GENERAL

(a) The undersigned (hereinafter called the "Bidder") proposes to furnish and install the meter loop services (hereinafter called the "Installations") to the premises of approximately 300 consumers of electric energy to be served through the rural electric distribution system of the Owner, which system is designated by the Rural Electrification Administration as ALABAMA-35-SMITH. The Installations are described in the Specifications, Description of Assembly Units and Drawings therefor attached hereto and made a part hereof. The Bidder agrees to furnish all materials, machinery, tools, equipment, (except meters, and meter bases, and service equipment enclosures, which the Owner shall furnish but the Bidder shall install), labor, transportation, and other means necessary therefor, for the prices hereinafter stated, and to make the Installations wherever directed so to do by the Owner. Such prices also include the amounts necessary to pay all testing and inspection charges.

(b) The Bidder has made a careful examination of the sites of the Installations and of the Specifications, Description of Assembly Units and Construction Drawings, and has become informed as to the location and nature of the proposed work, the transportation facilities, the kind and character of soil to be encountered and the kind of facilities

required before and during the performance of the work and has become acquainted with the labor conditions which would affect the work.

(c) The Bidder understands and agrees that the various Assembly Units on which bids are made in this Proposal are as set out in the Description of Assembly Units, that the prices for such units are as listed below, that all said bids are on a unit basis, and that the Owner may specify any number or combination of Assembly Units that the Owner, with the approval of the Administrator of the Rural Electrification Administration (hereinafter called the "Administrator"), may deem necessary for the Installations:

#### RESIDENCE UNITS

##### Assembly

| <u>Item Nos.</u> | <u>No. of Units</u> | <u>Unit</u> | <u>Size</u> | <u>Unit Price</u> |
|------------------|---------------------|-------------|-------------|-------------------|
| 1                | _____               | #1H1        | 8/2         | _____ ea.         |
| 2                | 50                  | #1H2        | 8/2         | \$6.20 ea.        |
| 3                | _____               | #1H3        | 8/2         | _____ ea.         |
| 4                | _____               | #2H1        | 6/3         | _____ ea.         |
| 5                | 50                  | #2H2        | 6/3         | \$7.50 ea.        |
| 6                | _____               | #2H3        | 6/3         | _____ ea.         |

#### Yard Pole Units (Method -1- Using Conduit)

|   |       |      |     |           |
|---|-------|------|-----|-----------|
| 7 | _____ | #3P1 | 6/5 | _____ ea. |
| 8 | _____ | #4P1 | 4/5 | _____ ea. |
| 9 | _____ | #5P1 | 2/5 | _____ ea. |

(Method -1- Using Electrical Metallic Tubing)

| <u>Item Nos.</u> | <u>No. of Units</u> | <u>Unit</u> | <u>Size</u> | <u>Unit Price</u> |
|------------------|---------------------|-------------|-------------|-------------------|
| 10               | _____               | #3P1        | 6/5         | _____ ea.         |
| 11               | _____               | #4P1        | 4/5         | _____ ea.         |
| 12               | _____               | #5P1        | 2/5         | _____ ea.         |

(Method -2- Using Conduit)

|    |            |      |     |                    |
|----|------------|------|-----|--------------------|
| 13 | <u>200</u> | #3P2 | 6/5 | <u>\$12.00</u> ea. |
| 14 | _____      | #4P2 | 4/5 | _____ ea.          |
| 15 | _____      | #5P2 | 2/5 | _____ ea.          |

(Method -2- Using Electrical Metallic Tubing)

|    |       |      |     |           |
|----|-------|------|-----|-----------|
| 16 | _____ | #3P2 | 6/5 | _____ ea. |
| 17 | _____ | #4P2 | 4/5 | _____ ea. |
| 18 | _____ | #5P2 | 2/5 | _____ ea. |

(Method -3- Using Conduit)

|    |       |      |     |           |
|----|-------|------|-----|-----------|
| 19 | _____ | #3P3 | 6/5 | _____ ea. |
| 20 | _____ | #4P2 | 4/5 | _____ ea. |
| 21 | _____ | #5P3 | 2/5 | _____ ea. |

(Method -3- Using Electrical Metallic Tubing)

|    |       |      |     |           |
|----|-------|------|-----|-----------|
| 22 | _____ | #3P3 | 6/5 | _____ ea. |
| 23 | _____ | #4P3 | 4/5 | _____ ea. |
| 24 | _____ | #5P3 | 2/5 | _____ ea. |

Unit prices for each house service are based on eight (8) feet of service entrance cable. For each foot of entrance cable in excess of, or less than eight (8) feet required on any service the unit cost shall be increased, or decreased, as follows: Nos. 1H1, 1H2, 1H3 \$0.12: Nos. 2H1, 2H2, 2H3 \$0.20:

For each foot of grounding conductor greater or less than twelve (12) feet there shall be added to or deducted from the cost of the unit \$0.03. For each grounding electrode (ground rod), and clamp in excess of one (1) required for grounding the service neutral and equipment, the cost of the unit shall be increased \$2.00. Yard pole meter loops shall not be less than fifteen (15) feet long except where the consent in writing of the Owner is obtained for the installation of a yard pole meter loop of less than fifteen (15) feet. For each foot of service in excess of or less than fifteen (15) feet on pole meter loops, the unit price shall be increased or decreased as follows:

Conduit types Nos. 3P1, 3P2, 3P3 \$0.45 : Nos. 4P1, 4P2, 4P3 \$0.55 : Nos. 5P1, 5P2, 5P3 \$0.65 : Electrical metallic tubing types Nos. 3P1, 3P2, 3P3 \_\_\_\_\_ : Nos. 4P1, 4P2, 4P3 \_\_\_\_\_ : Nos. 5P1, 5P2, 5P3 \_\_\_\_\_.

(d) The Unit prices set forth herein include all amounts which are or may be payable by the Bidder or the Owner on account of taxes imposed by any taxing authority upon the sale, purchase or use of materials, supplies, or equipment to be incorporated in the work as part of such Assembly Units. The Bidder shall pay all such taxes and shall furnish to appropriate taxing authorities required information and reports pertaining thereto.

2. TIME OF COMPLETION. Each Installation will be commenced within ten (10) calendar days after the Owner shall have given the Bidder written notice to commence such Installation, shall be prosecuted diligently, and each Installation will be completed to the satisfaction of the Owner and the Administrator within 10 calendar days after the giving of the notice. The time for completion shall be extended for the period of any

reasonable delay due exclusively to causes beyond the control and without the fault of the Bidder, including acts of God, fires, floods, and acts or omissions of the Owner with respect to matters for which the Owner is solely responsible; provided, however, that no such delay in the time for completion of the work or in the progress of the work shall result in any liability on the part of the Owner.

3. DEFECTIVE WORKMANSHIP AND MATERIALS. The acceptance of any workmanship, materials or equipment by the Owner shall not preclude the subsequent rejection thereof if such workmanship, materials or equipment shall be found to be defective after delivery or installation, and any such workmanship, materials or equipment found defective before final acceptance of the work or within one (1) year after completion shall be remedied or replaced, as the case may be, by and at the expense of the Bidder. In the event of failure by the Bidder so to do, the Owner may remedy such defective workmanship or replace such defective materials or equipment, as the case may be, and in such event the Bidder shall pay to the Owner the cost and expense thereof.

4. PAYMENTS AND RELEASE OF LIENS.

(a) Payment for each Installation shall be made within fifteen (15) days after a certificate of completion and approval has been given to the Owner by the Wiring Inspector authorized by the Administrator to make such inspection and approval of the invoice pertaining thereto by the Manager of the Owner.

(b) Upon the completion of the Installations by the Bidder but prior to the payment to the Bidder of any amount in excess of 90% of the total cost of all Assembly Units comprising the completed Installations,

or at any other time specified by the Owner, with the approval of the Administrator, the Bidder shall deliver to the Owner in duplicate releases of all liens and rights to claim any lien, in a form satisfactory to the Administrator, from all manufacturers, materialmen, and sub-contractors furnishing services or materials for the Installations and an affidavit, in a form satisfactory to the Administrator, to the effect that all labor used on or for the Installations has been paid and that all such releases have been submitted to the Owner; and the Owner shall deliver to the Administrator for the Administrator's approval one of the duplicates of each such release and affidavit.

(c) The Bidder shall pay each materialman and each sub-contractor, if any, within five (5) days after receipt of any payment from the Owner, the amount thereof allowed the Bidder for and on account of materials furnished or work performed by each materialman or each sub-contractor.

5. PROTECTION TO PERSONS AND PROPERTY. The Bidder shall at all times take all reasonable precautions for the safety of employees on the work and of the public and shall comply with all applicable provisions of Federal, State, and Municipal safety laws and building and construction codes. All machinery and equipment and other physical hazards shall be guarded in accordance with the "Manual of Accident Prevention in Construction" of the Associated General Contractors of America, unless such instructions are incompatible with Federal, State, or Municipal laws or regulations. The Bidder will hold the Owner harmless from any and all claims for injuries to persons or for damage to property happening by reason of any negligence on the part of the Bidder, or any of the Bidder's agents or employees during the work.

6. INSURANCE. If the number of consumers to be served as set forth in Paragraph 1 (a) above shall be in excess of 100, the Bidder will take out and maintain insurance, satisfactory to the Administrator, in the following minimum requirements:

(a) Adequate workmen's compensation insurance.

(b) Public liability insurance in the limits of \$10,000 for injuries to or death of one person and \$20,000 for one accident, and property damage liability insurance in the limit of \$2,000 per accident and \$10,000 for accidents during the policy period, covering accidents resulting during the work other than by motor vehicles.

(c) Public liability insurance in the same limits as set forth above under (b), and property damage liability insurance in the limit of \$5,000 covering accidents resulting from the operation of any motor vehicle used in connection with the work, whether or not owned by the Bidder.

(d) The Bidder will furnish to the Administrator a certificate evidencing its compliance with the foregoing requirements.

7. PURCHASE OF MATERIALS. The Bidder will purchase all materials and supplies outright and not subject to any conditional sales agreement, bailment lease or other agreement reserving to the seller any right, title or interest therein. All materials and supplies shall become the property of the Owner when erected in place.

8. PATENT INFRINGEMENT. The Bidder will save harmless and indemnify the Owner from any and all claims, suits, and proceedings for the infringement of any patent or patents covering any materials or equipment used in work.

9. COMPLIANCE WITH STATUTES AND REGULATIONS.

(a) The Bidder will comply with all applicable statutes,

ordinances, rules and regulations pertaining to the work. The Bidder acknowledges that it is familiar with the Rural Electrification Act as amended, the so-called "Kick-Back" statute (48 statute 948) and regulations issued pursuant thereto, and Section 35 of the United States Criminal Code as amended. The Bidder will furnish each week an affidavit in the form attached hereto and made a part hereof, together with a copy of Bidder's payroll as required by the regulations issued under the "Kick-Back Statute."

(b) The Bidder will, except to the extent that the Administrator shall otherwise direct, incorporate in the Installations only such unmanufactured articles, materials, and supplies as have been mined or produced in the United States and only such manufactured articles, materials, or supplies mined, produced, or manufactured, as the case may be, in the United States.

(c) It is understood that the obligations of the parties hereunder are subject to the applicable regulations of the Civilian Production Administration, the Office of Price Administration, and other Governmental Agencies having jurisdiction. The Bidder certifies that the unit prices set forth herein are not in excess of the legal maximum price. The unit prices set forth herein will be reduced to conform to the legal maximum prices if they are in excess of such legal maximum prices.

(d) The Bidder will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin.

10. TERMINATION. The time of completion of each Installation as set forth in Paragraph 2 hereof is of the essence of the contract to be effected by acceptance of this Proposal. If the successful Bidder neglects,

refuses, or fails to complete the work within such time, the Owner shall have the right to terminate the contract to be effected by acceptance of this Proposal provided it shall have given ten (10) days prior notice in writing to the Bidder of its intention so to do.

11. CUMULATIVE REMEDIES. Every right or remedy herein conferred upon or reserved to the Owner or the Administrator shall be cumulative and shall be in addition to every right and remedy now or hereafter existing at law or in equity or by statute. The pursuit of any right or remedy shall not be construed as an election.

12. BOND. If the number of consumers to be served as set forth in Paragraph 1 (a) above shall be in excess of 100, the Bidder, if this Proposal is accepted, will furnish a contractor's bond in the form attached hereto and made part hereof, with a surety or sureties satisfactory to the Owner and the Administrator, in a penal sum not less than the contract price. In the event that the surety or sureties on such bond shall at any time become unsatisfactory to the Owner or the Administrator, the Bidder will deliver to the Owner another or an additional bond in such form and with such surety or sureties as the Owner and the Administrator may approve.

13. NON-ASSIGNMENT OF CONTRACT. The Bidder will not assign the contract effected by an acceptance of this Proposal, or any part thereof, or enter into any contract with any person, firm or corporation for the performance of the Bidder's obligations thereunder, or any part thereof, without the approval in writing of the Owner and the Administrator.

14. APPROVAL BY THE ADMINISTRATOR. No acceptance of this Proposal shall become effective until approved in writing by the Administrator.

JOHN DOE  
Bidder

By

Title

217 SMITH STREET

MOCKVILLE, ALA.

Address

Date NOVEMBER 6, 1945

AFFIDAVIT

(Pursuant to "Kick-Back Statute")

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

I, \_\_\_\_\_ (name of party signing affidavit) \_\_\_\_\_ (title), being duly sworn, do depose and say: That I pay or supervise the payment of the persons employed by \_\_\_\_\_ (contractor or sub-contractor) on attached payroll which sets out accurately and completely the name, occupation, and hourly wage rate of each person so employed for the weekly payroll period from the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, to the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, the total number of hours worked by him during such period, the full weekly wages earned by him and any deductions made from such weekly wages, and the actual weekly wages paid to him: that no rebates have been or will be made either directly or indirectly to or on behalf of said \_\_\_\_\_ (contractor or sub-contractor) from the full weekly wages earned as set out on the attached payroll; and that no deductions, other than the permissible deductions, (as defined in the Regulations under the "Kick-Back Act (48 Statute 948) described in the following paragraph of this affidavit, have been made or will be made, either directly or indirectly, from the full weekly wages earned as set out on the attached payroll.

(Paragraph describing deductions, if any)

\_\_\_\_\_  
(Signature and Title)

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

ACCEPTANCE

The Owner accepts the following items of the foregoing Proposal to furnish and install approximately 300 meter loop services, on the terms and conditions therein stated.

Items 2, 5, AND 13.

TOTAL COST PRICE \$ 3,085.00

SMITH COUNTY ELECTRIC CO-OP INC.  
Owner

By JAMES SMITH  
President

ATTEST.

WILL JONES  
Secretary

CONTRACTOR'S BOND

1. Know all men that we, \_\_\_\_\_

\_\_\_\_\_, as Principal, and \_\_\_\_\_

\_\_\_\_\_, as Surety, are held

and firmly bound unto \_\_\_\_\_  
(hereinafter called the "Owner") and unto the United States of America (hereinafter called the "Government") and unto all persons, firms, and corporations who or which may furnish materials (except meters and service equipment enclosures) for or perform labor in connection with the furnishing and installing of the main service entrance (hereinafter called the "Installations") to the premises of consumers of electric energy to be served through the rural electric transmission or distribution system (hereinafter called the "System") of the Owner, designated by the Rural Electrification Administration as \_\_\_\_\_

and to their successors and assigns, in the penal sum of \_\_\_\_\_

\_\_\_\_\_ dollars (\$ \_\_\_\_\_), as hereinafter set forth and for the payment of which sum well and truly to be made we bind ourselves, our executors, administrators, successors, and assigns jointly and severally by these presents. Said Installations are described in a certain contract (hereinafter called the "Installation Contract") between the Owner and the Principal, dated

\_\_\_\_\_, 19\_\_\_\_, pursuant and subject to a loan contract or loan contracts (hereinafter called the "Loan Contract") between the Owner and the Government, acting through the Administrator of the Rural Electrification Administration (hereinafter called the "Administrator").

2. The condition of this obligation is such that if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of the Installation Contract and any amendments thereto, whether such amendments are for additions, decreases, or changes in the installations or the materials, their locations, quantity, kind, or price, or any other purpose whatsoever, and whether such amendments are made with or without notice to the Surety, and shall fully indemnify and save harmless the Owner and the Government from all costs and damages which they, or either of them, shall suffer or incur by reason of any failure so to do, and shall fully reimburse and repay the Owner and the Government for all outlay and expense which they, or either of them, shall incur in making good any such failure of performance on the part of the Principal, and shall promptly make payment to all persons supplying labor and materials (except meters and service equipment enclosures) for use in the Installations contemplated in the Installation Contract and any amendments thereto, in respect of such labor and materials

furnished and used therein, to the full extent thereof, and in respect of such labor or materials furnished, but not so used, to the extent of the quantities estimated in the Installation Contract and any amendments thereto to be required for the making of the installations, and shall well and truly reimburse the Owner and the Government, as their respective interests may appear, for any excess in the cost of the Installations over the cost thereof as provided in the Installation Contract and any amendments thereto, occasioned by any default of the Principal under the Installation Contract and any amendments thereto, then this obligation shall be null and void, but otherwise shall remain in full force and effect.

3. It is expressly agreed that this bond shall be deemed amended automatically and immediately, without formal and separate amendment hereto, upon any amendment to the Installation Contract, so as to bind the Principal and the Surety to the full and faithful performance of the Installation Contract as so amended, provided only that the total amount of all increases in the cost of the Installations shall not exceed 20 percent of the amount of the maximum price set forth in the Installation Contract. The term "amendment," wherever used in this bond, and whether referring to this bond, the Installation Contract or the Loan Contract, shall include any alteration, addition, extension, modification, amendment, rescission, waiver, release, or annulment, of any character whatsoever.

4. It is expressly agreed that any amendment which may be made by agreement or otherwise between the Principal and the Owner in the terms, provisions, covenants, and conditions of the Installation Contract, or in the terms, provisions, covenants, and conditions of the Loan Contract (including, without limitation, the granting by the Administrator to the Owner of any extension of time for the performance of the obligations of the Owner under the Loan Contract or the granting by the Administrator or the Owner to the Principal of any extension of time for the performance of the obligations of the Principal under the Installation Contract, or the failure or refusal of the Administrator or the Owner to take any action, proceeding, or step to enforce any remedy or exercise any right under either the Installation Contract or the Loan Contract, or the taking of any action, proceeding or step by the Administrator or the Owner, acting in good faith upon the belief that the same is permitted by the provisions of the Installation Contract or the Loan Contract) shall not in any way release the Principal and the Surety, or either of them, or their respective executors, administrators, successors, or assigns, from liability hereunder. The Surety hereby acknowledges receipt of notice of any amendment, indulgence, or forbearance, made, granted, or permitted.

5. This bond is made for the benefit of all persons, firms, and corporations who or which may furnish any materials (except meters and service equipment enclosures) or perform any labor for or on account of the Installations to be performed under the Installation Contract and any amendments thereto, and they, and each of them, are hereby made obligees hereunder with the same force and effect as if their names were written herein as such, and they, and each of them, may sue hereon.

IN WITNESS WHEREOF, the undersigned have caused this instrument to be executed and their respective corporate seals to be affixed and attested by their duly authorized representatives this

\_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_

\_\_\_\_\_  
Principal. (SEAL)

Attest:

By \_\_\_\_\_

\_\_\_\_\_  
Secretary.

\_\_\_\_\_  
Surety. (SEAL)

Attest:

By \_\_\_\_\_

\_\_\_\_\_  
Secretary.

By \_\_\_\_\_  
Resident Agent of Surety.

(The Contractor's Bond must be signed with the full name of the Contractor. If the Contractor is a partnership the Contractor's Bond must be signed in the partnership name by each partner. If the Contractor is a corporation the Contractor's Bond must be signed in the corporate name by a duly authorized officer and the corporate seal affixed and attested by the Secretary of the corporation. A typewritten copy of all such names and signatures shall be appended. The Contractor's Bond must be countersigned by a duly authorized resident agent of the Surety.)



|  |   |             |
|--|---|-------------|
| Department of Agriculture<br>Rural Electrification<br>Administration | CERTIFICATE<br>OF CONTRACTOR'S INSURANCE<br>REA BORROWERS | Date: _____ |
|--|---|-------------|

This is to certify that the types of insurance policies designated below have been issued by the \_\_\_\_\_ and are in force on

(Name of Insurance Company)

the date borne by this certificate.

1. Name and address of insured for whom this certificate is issued:

| 2. Types of Insurance                          | Policy Number | Code Number | Expiration Date | PL Limits Liability | PD Limits Liability | States in which operations are covered |
|--|---------------|-------------|-----------------|---------------------|---------------------|--|
| (a) Statutory Workmen's Compensation           |               |             |                 | xx                  | xx                  |  |
| (b) Employers' Liability                       |               |             |                 |                     |                     |  |
| (c) Contractors' PL&PD                         |               |             |                 |                     |                     |  |
| (d) Employers' Non-ownership & Hired Car PL&PD |               |             |                 |                     |                     |  |
| (e) Owned Automobile PL&PD                     |               |             |                 |                     |                     |  |
|  |               |             |                 |                     |                     |  |

Such insurance as is afforded by the above policies applies to all of the operations undertaken by the insured for the REA systems located in the states designated above.

The insurance afforded by the above-designated policies is in accordance with the company's standard policies, to which is attached the following endorsement:

"The Insurer agrees with the RURAL ELECTRIFICATION ADMINISTRATION as follows:

1. That it will furnish to the Administration a Certificate of Insurance on a form approved for such purpose by said Administration, setting forth the pertinent information regarding the policy to which this endorsement is attached, for each borrower financed by said Administration to which the policy applies.
2. That it will attach to said Certificate of Insurance, duplicate copies of any endorsement other than this endorsement, which are attached to said policy at the time said policy is issued, provided only that said endorsements affect the coverage of said policy in respect of operations performed for REA borrowers.
3. That it will mail to said Administration a copy of each endorsement subsequently issued to become a part of said policy, provided only that such endorsement affects the coverage of said policy in respect of operations performed for REA borrowers.
4. That it will mail to said Administration, at least 10 days before the effective date thereof, notice of cancelation of said policy."

This Certificate and the attached endorsements, if any, are furnished in accordance with the requirements of the RURAL ELECTRIFICATION ADMINISTRATION, in lieu of duplicate originals of the above-designated policies and endorsements attached thereto.

(Insurer)

By \_\_\_\_\_

(Authorized Representative)



# ELECTRIFICATION ADMINISTRATION

DATE:

NOTE: TO BE SUBMITTED TO REA WITH METER LOOP CONTRACTS.

[illegible]



|   |  |                                     |
|---|--|-------------------------------------|
| Department of Agriculture<br><br>Rural<br>Electrification<br>Administration | CERTIFICATE<br><br>COMPLETION OF WORK UNDER<br><br>SERVICE METER LOOP CONTRACT | Date:<br><br><u>JANUARY 3, 1946</u> |
|---|--|-------------------------------------|

NAME OF OWNER SMITH COUNTY ELECTRIC COOPERATIVE, INC.REA SYSTEM DESIGNATION ALABAMA-35-SMITHREA LOAN CONTRACT NO. A-103-re5

To:

Administrator  
 Rural Electrification Administration  
 Washington 25, D. C.

I, L.C. ADAMS, the duly authorized Manager for the  
 above named Owner, hereby certify that the work assigned to JOHN DOE,  
 (Name of Contractor)  
 which was included in the Service Meter Loop Contract executed between,  
SMITH COUNTY ELECTRIC CO-OP, INC. and JOHN DOE, dated  
 (Name of Cooperative) (Name of Contractor)  
9-10-45, has been completed in strict compliance with all terms and pro-  
 visions of the Service Meter Loop Contract, including specifications and draw-  
 ings attached to and made a part of the Service Meter Loop Contract.

I do further hereby certify that the Contractor has obtained valid re-  
 leases of lien from all persons, firms and/or corporations furnishing materials,  
 supplies and appliances which were employed by the Contractor in the performance  
 of the Service Meter Loop Contract and that such releases have been delivered by  
 the Contractor to the named Owner.

I also certify that payment in full has been made to all persons per-  
 forming services or labor in connection with the completion of the Service Meter  
 Contract.

I further certify that the total cost of such units is \$3,103.16  
 and consists of units as shown on the attached tabulation designated as the final  
 inventory.

Dated this 3rd day of JANUARY, 19 46.

L.C. ADAMS  
 Project Manager



FINAL INVENTORY FOR SERVICE METER LOOPSJOHN DOE

Name of Contractor

ALA. 35-SMITH

Project Designation

| No. | Name of Member | Address   | Unit | Unit Price | Extra Cable | Cost Extra Cable | Total Cost Unit |
|-----|----------------|-----------|------|------------|-------------|------------------|-----------------|
| 1   | J. L. Williams | Alamo     | 1H2  | \$ 6.20    | 3'          | \$ .36           | \$ 6.56         |
| 2   | W. B. Jones    | Alexander | 1H2  | 6.20       |             |                  | 6.20            |
| 3   | L. C. Baxter   | Woodson   | 2H2  | 7.50       | 5'          | 1.00             | 8.50            |

Installations 4 to 296 inclusive are deleted. This is only an illustration and totals are imaginary.

|        |                 |           |     |       |    |         |           |
|--------|-----------------|-----------|-----|-------|----|---------|-----------|
| 297    | Robert Haven    | Sexton    | 2H2 | 7.50  |    |         | 7.50      |
| 298    | Willie Smith    | Woodson   | 2H2 | 7.50  | 2' | .40     | 7.90      |
| 299    | Abbie Jones     | Alexander | 3P2 | 12.00 |    |         | 12.00     |
| 300    | Hamilton Baxter | Woodson   | 3P2 | 12.00 |    |         | 12.00     |
| Totals |                 |           |     |       |    | \$18.16 | \$3103.16 |

SUMMARY

| Quantity | Unit  | Unit Price | Total Cost       |
|----------|-------|------------|------------------|
| 50       | 1H2   | \$ 6.20    | \$310.00         |
| 73'      | 2 # 8 | .12        | 8.76             |
| 50       | 2H2   | 7.50       | 375.00           |
| 47'      | 3 # 6 | .20        | 9.40             |
| 200      | 3P2   | 12.00      | 2400.00          |
|          |       |            | <u>\$3103.16</u> |

I hereby certify the above installations have been made by my firm in accordance with REA specifications and that all material costs, labor and liens have been paid. I hereby guarantee all workmanship and materials for a period of one year.

Date JANUARY 3, 1946JOHN DOE  
Contractor

I certify that in respect of each meter service installation as shown herein the Borrower has obtained a Certificate of Approval signed by an authorized inspector and written evidence as to ownership of the service entrance equipment in the form of either a Certificate of Ownership signed by the owner of the premises on which such installation was made or an easement from such owner in which he expressly agrees that such equipment shall remain the property of the Borrower. I further certify that the certificates and easements mentioned herein are being maintained as part of the permanent records of the Borrower.

Date JANUARY 3, 1946L.C. ADAMS  
Manager



SUPPLEMENTARY MAIN SERVICE ENTRANCE INSTALLATION CONTRACT

AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, between  
\_\_\_\_\_  
(hereinafter called the "Owner") and  
\_\_\_\_\_  
(hereinafter called the "Contractor").

WHEREAS, the Owner and the Contractor entered into a contract, dated  
\_\_\_\_\_, (hereinafter called the "Installation Contract")  
for the furnishing and installing of meter loop services (hereinafter  
called the "Installations") for the rural electric distribution system of  
the Owner designated \_\_\_\_\_; and

WHEREAS, the parties desire to enter into this Agreement for the fur-  
nishing and installing of additional Installations;

NOW, THEREFORE, for and in consideration of the mutual undertakings  
herein contained, the parties hereto agree as follows:

1. In addition to the Installations provided for by the Installation  
Contract, the Contractor shall furnish and install approximately \_\_\_\_\_  
installations, as directed by the Owner, in accordance with all of the pro-  
visions of the Installation Contract, except those expressly modified herein.
2. The Contractor shall complete such Installations within \_\_\_\_\_ days  
after notice from the Owner to begin the work, but the Contractor shall not  
be required to install any Installations hereunder after \_\_\_\_\_ months from  
the date hereof.

3. The unit prices for the Installations shall be as follows:

RESIDENCE UNITS

| <u>Item Nos.</u> | <u>Assembly<br/>No. of Units</u> | <u>Unit</u> | <u>Size</u> | <u>Unit Price</u> | <u>Total</u> |
|------------------|----------------------------------|-------------|-------------|-------------------|--------------|
| _____            | _____                            | _____       | _____       | @ _____           | _____        |
| _____            | _____                            | _____       | _____       | @ _____           | _____        |
| _____            | _____                            | _____       | _____       | @ _____           | _____        |
| _____            | _____                            | _____       | _____       | @ _____           | _____        |

Yard Pole Units

Method   

Total

|       |       |       |       |                 |
|-------|-------|-------|-------|-----------------|
| _____ | _____ | _____ | _____ | _____ ea. _____ |
| _____ | _____ | _____ | _____ | _____ ea. _____ |
| _____ | _____ | _____ | _____ | _____ ea. _____ |
| _____ | _____ | _____ | _____ | _____ ea. _____ |

Total Increase in Amount of \$ \_\_\_\_\_

4. This Agreement shall become effective only upon approval in writing by the Administrator of the Rural Electrification Administration.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed by their respective authorized officials.

\_\_\_\_\_  
Owner

ATTEST:

By \_\_\_\_\_  
President

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Contractor

By \_\_\_\_\_

(Seal)

\_\_\_\_\_  
Title

AMENDMENT OF METER LOOP SERVICE CONTRACT

AGREEMENT, made \_\_\_\_\_, between \_\_\_\_\_  
\_\_\_\_\_  
(hereinafter called  
the "Owner") and \_\_\_\_\_ of \_\_\_\_\_  
(hereinafter called the "Contractor").

WHEREAS, the Owner and the Contractor entered into a Meter Loop  
Service Contract, dated \_\_\_\_\_ (hereinafter  
called the "Contract"); and

WHEREAS, the Owner and the Contractor desire to amend the Contract  
in the respects hereinafter set forth;

NOW, THEREFORE, in consideration of the mutual undertakings herein  
contained, the parties hereto agree as follows:

1. (Here insert desired revisions  
of original contract)

Except as expressly modified herein, the Contract shall remain in full force and effect.

This Agreement shall become effective only upon approval in writing by the Administrator of the Rural Electrification Administration.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed by their respective authorized officers.

\_\_\_\_\_  
Owner

By \_\_\_\_\_  
President

Attest:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Contractor

By \_\_\_\_\_

\_\_\_\_\_  
(title)

AGREEMENT

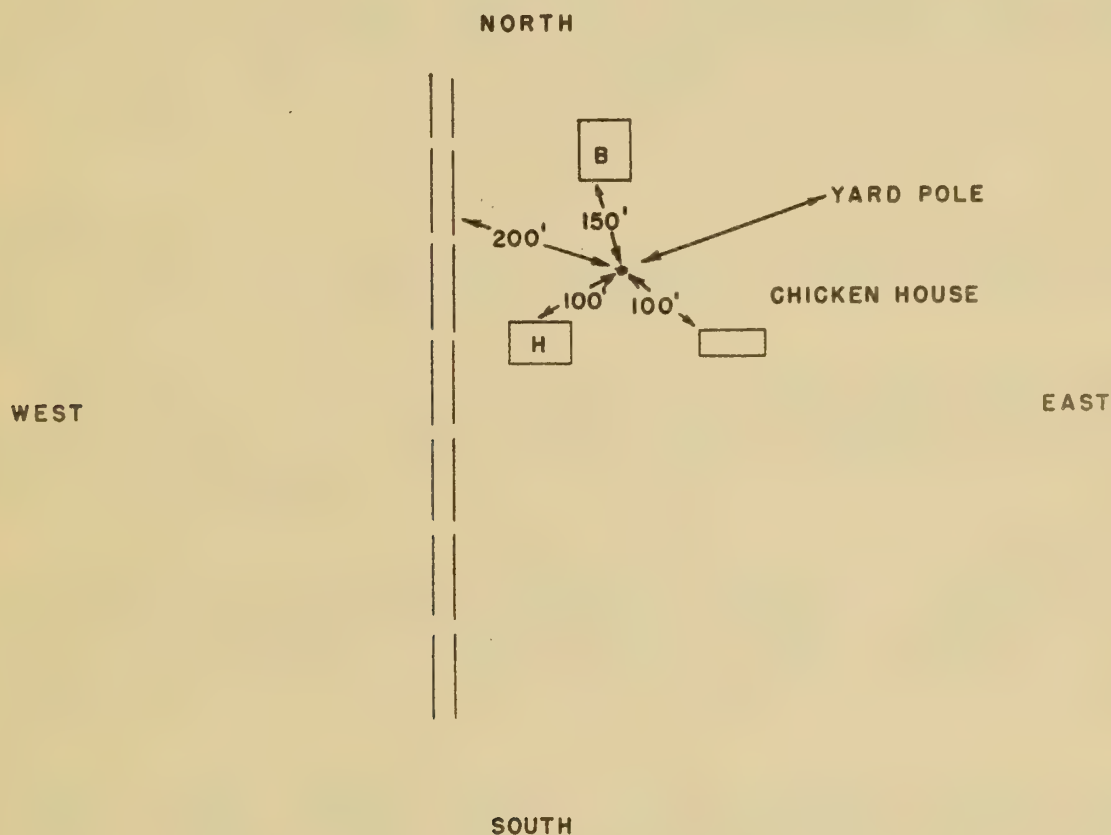
Map #

Sec.                  Twp.                  Range

I have discussed location of yard pole on my premises with representative of the \_\_\_\_\_

(Name of Cooperative)

and agree to the location as shown on the drawing below:



Estimated transformer demand

\_\_\_\_\_ K.V.A.

\_\_\_\_\_  
Cooperative Representative

\_\_\_\_\_  
Owner

\_\_\_\_\_  
Address



MATERIAL AND INSTALLATION SPECIFICATIONS  
FOR  
METER LOOP SERVICE FOR INSTALLATIONS

These Specifications are divided into two parts for convenience and reference, as follows:

Part I. -- Specifications for Materials.

Part II. -- Specifications for Installations.

The Specifications are presumably correct but complete accuracy is not guaranteed. Notes, figures, and writing on the Drawings must be strictly followed as they constitute a part of the Specifications. Should any error or ambiguity be discovered in the Drawings or in the Specifications, the Contractor shall report the same to the Engineer or Manager before starting the work. In the event of a disagreement as to the true intent and meaning of the Specifications, which shall not be adjusted between the Manager and the Contractor, such disagreement shall be referred to the Administrator, and his decision shall be final and conclusive.

Part I. -- Specifications for Materials.

GENERAL.

This part of the Specifications describes the types, sizes, and characteristics of the various materials required for the meter loop service installation as shown on the drawings attached.

All materials used shall conform to the requirements of the Underwriters Laboratories, Inc., and if such materials have been approved by the Underwriters Laboratories, Inc., they shall carry Underwriters Laboratories' label of listing of approval.

Alternative or equivalent materials specified in any Contractor's Proposal will be considered if detailed information showing that such materials comply with these Specifications is furnished by the Bidder. Full data, including dimension drawings and photographs, shall be submitted on all new or special equipment.

HARDWARE.

Service Head. The Service Head shall either be of the "weather-head" or the "gooseneck service cable head" type. The "weather-head" type shall be of corrosion-resistive metal or be well galvanized or otherwise properly coated with a resisting material, inside and outside, to prevent corrosion. Each "weather-head" shall be equipped with a wet-process porcelain or approved composition bushing having three or five openings, as required, located so that snow or rain cannot enter the fitting. The "weather-head," if used with service entrance cable, shall be provided with a clamp for the proper size cable; if used with rigid conduit, it shall be threaded, or, if used with electrical-metallic-tubing, it shall fit the tubing with a water-tight connection. The "gooseneck" type shall be of a corrosion-resistive metal or be well galvanized or otherwise properly coated with a resisting material, inside and outside, to prevent corrosion. Each "gooseneck" type service head shall be so constructed

as to protect the outer diameter of the service entrance cable on the goose-neck bend, and shall be capable of being securely mounted to the building surface with one lag screw or expansion bolt. Each "gooseneck" type service head shall be provided with two clamps of the proper size to hold securely the service entrance cable in its proper position. Service Entrance cable, when used with "gooseneck" type service head shall be taped and painted.

Sill Plates. - These shall be of the compound filled type giving a water-tight seal around the cable when properly attached to a flat surface. Metal shall be of corrosion-resistive metal, or be well galvanized or otherwise properly coated with corrosive-resisting material to prevent corrosion.

Cable Straps. - These shall be malleable metal straps, effectively coated so as to be corrosion-resistive, and designed to hold cable securely to wall using a single screw (or expansion bolt) per clamp.

Service Entrance Cable Connectors. - Connectors for attaching entrance cable to meter base shall be water-tight.

Conduit. - Conduit shall be rigid steel conduit or electrical metallic tubing bearing Underwriters Laboratories' approval, being galvanized or sherardized.

Conduit Fittings. - These shall be of corrosion-resistive metal or shall be well galvanized or otherwise properly coated, inside and out, to prevent corrosion and must be threaded type.

Electrical Metallic Tubing Fittings. - These shall all be of water-tight type, and shall have the same corrosion resisting qualities as required for conduit fittings.

#### GALVANIZING.

All steel parts shall be hot dip galvanized in conformity with A.S.T.M. Specification 153-33T or shall have an equivalent coating of corrosion-resistive treatment.

#### GROUND ASSEMBLY. -

Ground Rod. - Rods shall be of hard-drawn copper, copperweld, or equivalent nonrusting material.

Ground Rod Clamp. - Clamps shall be of copper, bronze, or equivalent nonrusting material.

Ground Wire. - Wire shall be of soft-drawn solid copper, and not less than No. 6 A.W.G.

Staples. - Staples for wire shall be galvanized steel or equivalent of suitable size and length.

#### CONDUCTORS.

The conductors shall be #8 or larger, Type RP, as specified in 1940 National Electrical Code and approved by the Underwriters Laboratories, Inc.

Jumpers. - All neutral jumpers shall be of bare No. 6 or larger S.D. Copper.

Service Entrance Cable. - All service entrance cable shall be Type SE Style U approved by the Underwriters Laboratories, Inc.

#### CONNECTORS.

Connectors shall be standard split bolt distribution line type of non-rusting material.

### Part II. -- Specifications for Installation.

#### GENERAL.

This part of the Specifications describes that construction and engineering methods to be employed in installing the Meter Loop Services as shown on the drawings.

All work must be installed in accordance with the National Electrical Code (regulation of the National Board of Fire Underwriters) and any local or state laws in existence at the time of installation.

All work shall be done in a thorough and workmanlike manner in accordance with the Specifications and Drawings, and shall be subject to the acceptance of the Superintendent and the Administrator. Deviations from the Specifications and Drawings shall not be permitted except upon the written permission of the Manager given with the approval of the Administrator.

#### SCOPE.

The Specifications cover the installation of Meter Loop Services, for the rural electric transmission or distribution system designated by the Rural Electrification Administration as \_\_\_\_\_  
Said meter loop service installations consist of groups of 25 or more assembly units.

The System is located in the county or counties of \_\_\_\_\_

State of \_\_\_\_\_

All the above is as included within the terms of the Loan Contract.

#### DRAWINGS.

Drawings showing the types of construction to be used are attached and are part of these Specifications.

#### GROUND WIRE.

The ground wire shall extend continuously from the point of connection with the neutral service wire through the clamps which support the service cable to the ground rod to which it shall be firmly clamped.

If on pole meter loops, ground wire will be installed by others as part of line construction (see Engineering Memo 95R4). Grounding conductor may be either medium hard, or soft drawn.

#### GROUNDS.

Ground rods shall be driven full length in undisturbed earth at least two feet from the pole or building and the tops shall be at least 12 inches below the surface of the earth or shall be otherwise protected from mechanical injury or liability to cause injury to persons or animals. The trench and ground rod hole will be back-filled and firmly tamped.

#### METER LOOP SERVICE LOCATION.

The Contractor will be required to obtain approval of the meter loop location, whether on yard pole or residence, from an authorized agent of the Owner whose action shall have the approval of the property owner.

#### METER LOOP SERVICE ON RESIDENCE.

Each Meter Loop Service on a residence shall be located as near the kitchen as possible and shall be in such position to conform to provisions made by high line construction contractor for service drop to premises.

If the house wiring has been completed prior to the installation of the Meter Loop Service on residence, the meter loop and service switch must be located to conform to the termination of the house branch circuits. Service drop wires, ground wire, etc., must be located at least 5 feet, if possible, from all doors or windows.

Unit prices for meter loop service installations on residence will be complete (except meters, meter-bases, and raintight breaker equipment enclosures) including ground rod, ground wire, ground clamp, service entrance cable, weatherproof service head, supports, clamps, inspection, etc.) Each conductor of the cable shall extend beyond the service head and form drip loop when connecting to service drop. The bottom of the drip loop shall be

not less than six inches below the service head. If State laws require, or the owner desires, conduit or electrical metallic tubing with suitable conductors may be substituted for S-E cable.

Grounding conductor shall be connected to service drop neutral near wire holder, thence run down to ground on outside of building wall and connect to ground electrode by means of approved type clamps of bronze, brass, copper, or similar non-ferrous material. No soldering of copper straps will be permitted. Grounding conductor will be securely fastened in place along side service cable both within the cable straps, which shall be spaced not to exceed 4.5 feet. Owner will furnish meter, meter-base and raintight breaker equipment enclosures, but unit bid will include obtaining this equipment from the Owner's office, installing and connecting same to service entrance cable.

#### METER LOOP SERVICE ON YARD POLE.

Unit prices for meter loop service on yard pole, which will be referred to as "Yard Pole Meter Loop," shall be given for three separate sizes:

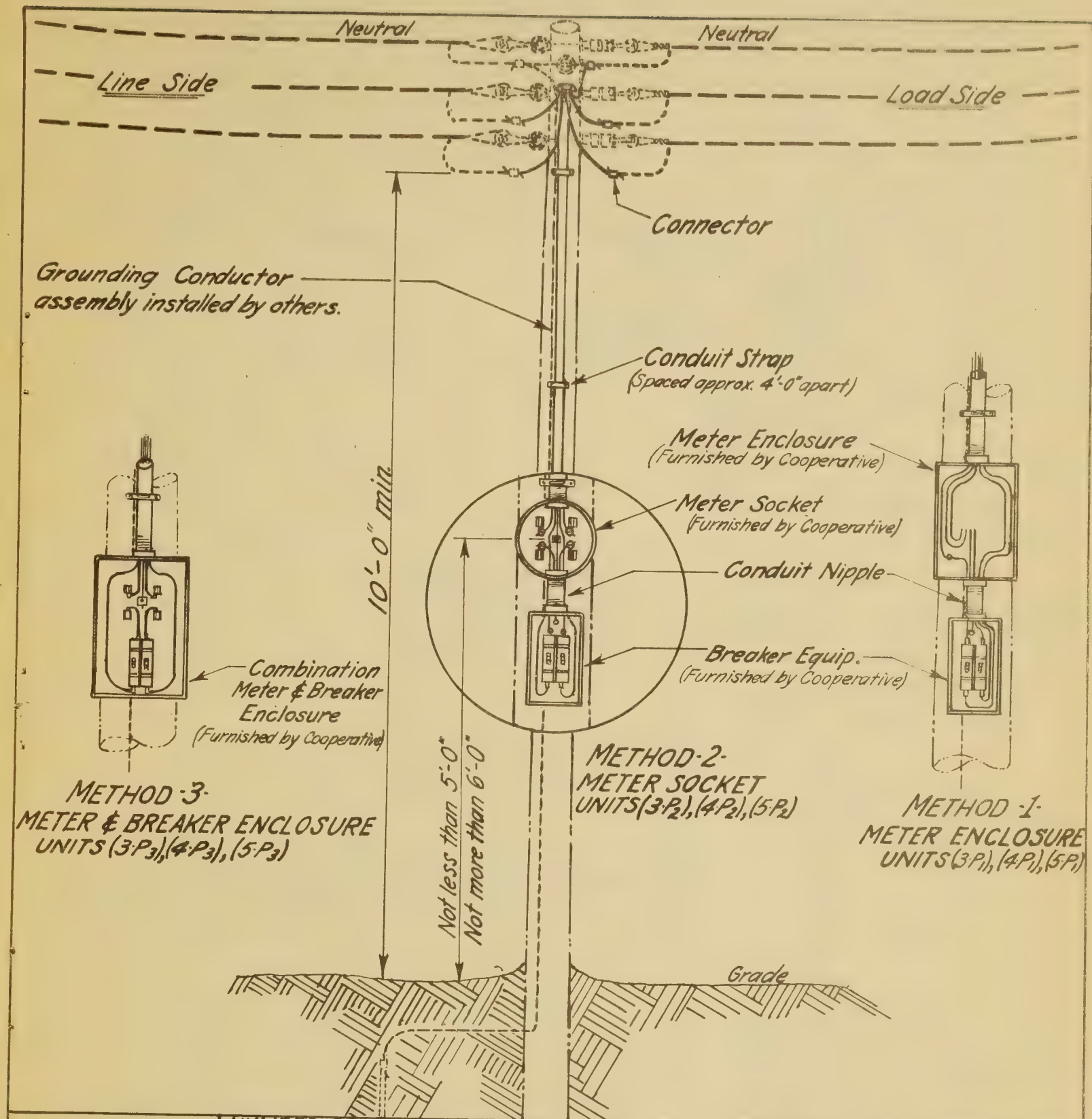
1. Four No. 6 A.W.G. insulated Type R.P. and one No. 6 A.W.G. bare in  $1\frac{1}{4}$  inch rigid conduit or electrical metallic tubing.
2. Four No. 4 A.W.G. insulated Type R.P. and one No. 6 A.W.G. bare in  $1\frac{1}{4}$  inch rigid conduit or electrical metallic tubing.
3. Four No. 2 A.W.G. insulated Type R.P. and one No. 6 A.W.G. bare in  $1\frac{1}{2}$  inch rigid conduit or electrical metallic tubing.

Each unit price will include labor, service conductors, conduit, weather-proof service head, bushings, fittings, supports, etc., and all incidentals to make a complete installation as shown on the Drawing. Meter loop will consist of five wires in conduit, as follows: Two insulated and one bare neutral on line side of meter and two insulated on load side. Neutral of service shall be connected to neutral terminal of meter, and thence continuously without splicing shall be extended to neutral terminal of breaker equipment.

All conductors shall be extended beyond service head to form drip loop connections to building feeders and service drop. The bottom of the drip loop shall be not less than six inches below the service head.

#### TESTING AND INSPECTION.

Each meter loop service shall be tested for and left free of all grounds, shorts, etc. Contractor will be required to obtain and furnish to the Owner a certificate of inspection and approval in duplicate from the authorized wiring inspector on the project, and to include the cost of each such inspection in the bid price for the assembly unit.



| MATERIAL               | NUMBER REQUIRED & SIZE |                 |                 |                 |                 |                 |                 |                 |                 | MATERIAL                 | NUMBER REQUIRED & SIZE |                 |                 |                 |                 |                 |                 |                 |                 |
|------------------------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------------------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                        | 3P <sub>1</sub>        | 3P <sub>2</sub> | 3P <sub>3</sub> | 4P <sub>1</sub> | 4P <sub>2</sub> | 4P <sub>3</sub> | 5P <sub>1</sub> | 5P <sub>2</sub> | 5P <sub>3</sub> |                          | 3P <sub>1</sub>        | 3P <sub>2</sub> | 3P <sub>3</sub> | 4P <sub>1</sub> | 4P <sub>2</sub> | 4P <sub>3</sub> | 5P <sub>1</sub> | 5P <sub>2</sub> | 5P <sub>3</sub> |
| Service Head (5-wire)  | 1-1 1/4"               | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/2"        | 1-1 1/2"        | 1-1 1/2"        | Conduit Nipple, 3"       | 1-1 1/4"               | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/2"        | 1-1 1/2"        | 1-1 1/2"        |
| Connector (solderless) |                        |                 |                 |                 |                 |                 |                 |                 |                 | Conductor - RP           | 4*6                    | 4*6             | 4*6             | 4*4             | 4*4             | 4*4             | 4*2             | 4*2             | 4*2             |
| Conduit                | 1-1 1/4"               | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/4"        | 1-1 1/2"        | 1-1 1/2"        | 1-1 1/2"        | Conductor (bare) Neutral | 1*6                    | 1*6             | 1*6             | 1*6             | 1*6             | 1*6             | 1*6             | 1*6             | 1*6             |
| Strap with screws      |                        |                 |                 |                 |                 |                 |                 |                 |                 |                          |                        |                 |                 |                 |                 |                 |                 |                 |                 |

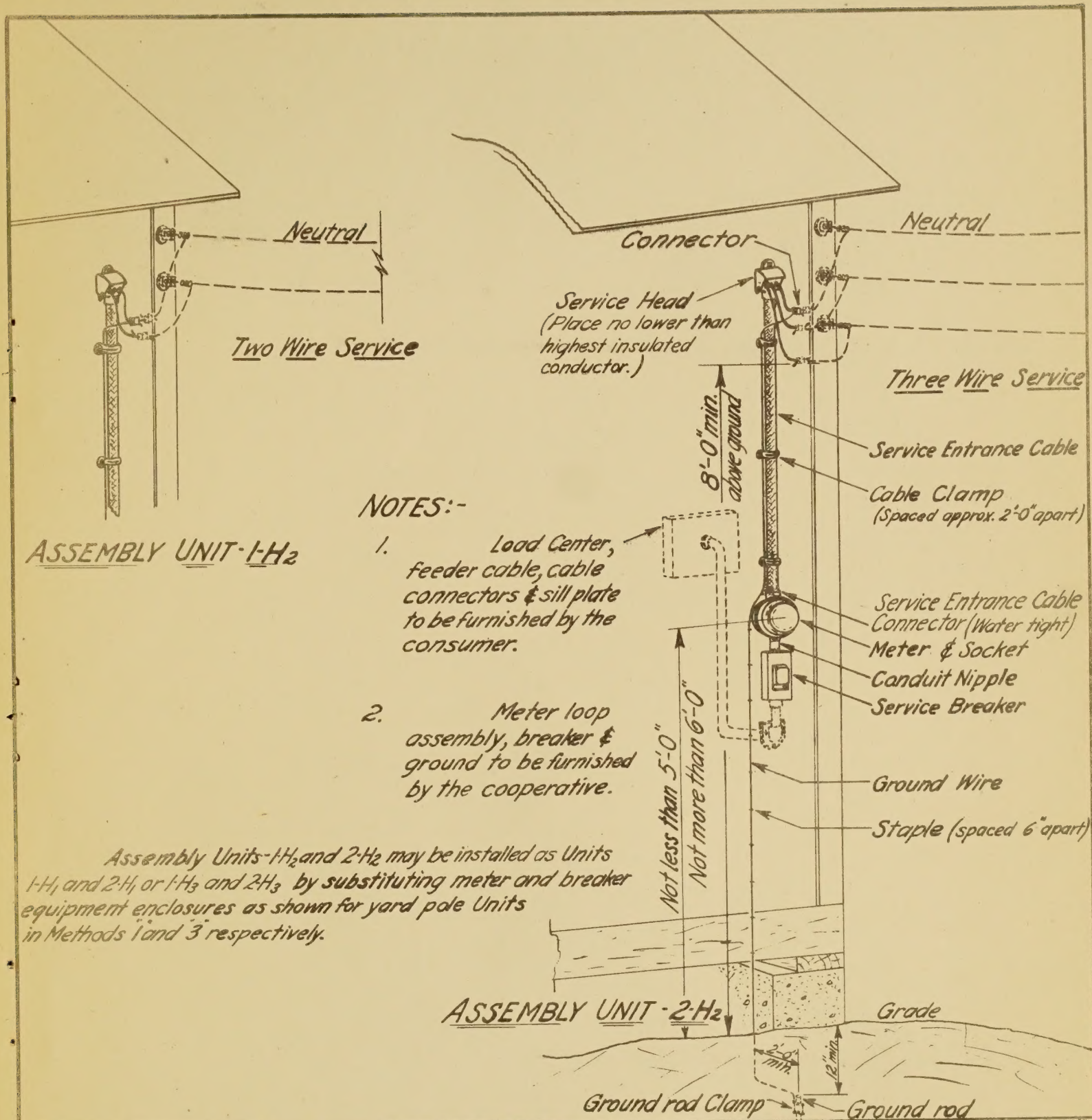
## YARD POLE METER INSTALLATION

AL-5 Revised

Scale: None

Date: Apr. 16, 1945





| MATERIAL                          | NUMBER REQ'D          |                       | MATERIAL                  | NUMBER REQ'D          |                       |
|-----------------------------------|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
|                                   | Unit 1-H <sub>2</sub> | Unit 2-H <sub>2</sub> |                           | Unit 1-H <sub>2</sub> | Unit 2-H <sub>2</sub> |
| Cable, Service Entrance           | as req'd              | as req'd              | Service Head              | 1                     | 1                     |
| Clamp, cable with screws          | as req'd              | as req'd              | Ground Wire, with staples | as req'd              | as req'd              |
| Connector, service entrance cable | 1                     | 1                     | Ground Rod, 1/2" x 8'-0"  | 1                     | 1                     |
| Conduit Nipple, 3"                | 1                     | 1                     | Clamp, ground rod         | 1                     | 1                     |
| Connector                         | 1                     | 1                     |                           |                       |                       |

### SERVICE ENTRANCE INSTALLATION (RESIDENCE)

AL-5 Revised

Scale: None

Date: Apr. 16, 1945





2. 10. 10

2. 10. 10

2. 10. 10